

**I claim:**

1. A multipurpose input device series-connected between an AC input source and a DC circuit, comprising:

a magnetic core having ferromagnetic characteristic; and

5 a coil winding conforming to EMC being wound around said magnetic core, said coil winding having the functions of an inrush current limiter, a fusible link, and an EMC choke.

2. The multipurpose input device as claimed in claim 1, wherein said magnetic core has a high resistivity and a high permittivity.

10 3. The multipurpose input device as claimed in claim 1, wherein said magnetic core has an appropriate coil frame or package mechanism to separate from a circuit.

4. The multipurpose input device as claimed in claim 1, wherein said coil winding is a fusible/resistance winding.

15 5. The multipurpose input device as claimed in claim 1, wherein said coil winding can be formed by assembling a first coil of a smaller number of turns with a second coil of a larger number of turns.

6. The multipurpose input device as claimed in claim 1, wherein a surface thereof can be coated with a covering layer having protection effect.

20